Appendix H

Conferences/Training

Contents:

a) 2013 04 4 & 5, Iowa Stormwater Conference Program (6 pages).

b) 2013 02 27 City of Ames, IA seminar on NPDES G.P. #2 changes, especially topsoil requirements (5 pages).

c) 2013 02 20 Rain Garden webinar (2 pages).

2013 IOWA WATER CONFERENCE

H_2O: Humans, Science and Oversight

March 4-5, 2013 | Iowa State University, Ames, Iowa

Program Reference

Monday, March 4, 2013

8:00 AM Registration desk opens, morning refreshments - *1st floor, Scheman*
Setup for exhibitors *(1st floor lobby)* and poster displays *(2nd floor lobby)*

8:00 Iowa Community Rating System (CRS) Toolkit Workshop (sponsored by IFSMA) - *275 Scheman*
Training continues until 12:15 pm.

Morning plenary session - Benton Auditorium, Scheman Building

9:55 Welcome and opening comments - *Rick Cruse, Iowa Water Center, Iowa State University*

Stormwater award presentation - *Pat Sauer, Iowa Storm Water Education Program*

10:05 *Water management under climate change: Can we handle the variation in precipitation?*
- Jerry Hatfield, Laboratory Director, National Laboratory for Agriculture and the Environment, USDA-ARS.

10:50 Des Moines Water Works' concerns about surface water quality and its impact on DMWW customers
- Bill Stowe, Des Moines Water Works

11:30 The world outside: What they say about why your work matters - *Eric Eckl, Water Words That Work*

12:15 PM Lunch (provided) - *220-240 Scheman. Staff will direct you to the buffet lines.*

Conference partners

Iowa Department of Agriculture and Land Stewardship

DNR

Iowa Association of Municipal Utilities

Iowa Water Center

Leopold Center

IFSMA Iowa Floodplain and Stormwater Management Association

IFC Iowa Flood Center

Iowa Storm Water Education Program

Iowa State University Extension and Outreach

USGS science for a changing world
Iowa Water Science Center

Trees Forever — Together We Grow

Monday, March 4, 2013

Afternoon workshops

All sessions are running concurrently on varying schedules. Please feel free to move from room to room selecting the topics of greatest interest to you. All sessions will take a refreshment break at 2:20 pm.

Floodplain and Storm Water, Benton Auditorium	
Floodplain management	
1:15 PM	Floodplain Management and Risk Communication: An Iowa Silver Jackets Pilot - *Jason Smith and Mike Dougherty, USACE Rock Island*
1:50	Living with Floods: Interdisciplinary Flood Institute for Teachers - *Ted Neal and Leslie Flynn, College of Education, University of Iowa*
2:20	Break - *refreshments available in 1st and 2nd floor lobby areas*
Urban Stream Restoration: Putting a Facelift on a Damaged System	
2:45	Ankeny Did it to North Creek with Re-Shaping, Native Plantings and a Biocell- *Greg Pierce, Nilles Associates*
3:20	Davenport is Quacking over the Duck Creek Streambank Stabilization Project - *Brian Stineman*, City of Davenport
3:55	Restoring Fourmile Creek, One Trib at a Time- *Amy Bryant, City of Ankeny and Ivo Lopez, Snyder & Associates*

Conservation Works, 250-252 Scheman	
1:15 PM	STRIPS Project at Neal Smith - *Lisa Schulte Moore , Seth Watkins, Matt Helmers, Matt Liebman, Iowa State University and Doug Davenport, NRCS*
2:20	Break - *refreshments available in 1st and 2nd floor lobby areas*
2:45	STRIPS Project at Neal Smith *(continued)*

Communication and Outreach, 260-262 Scheman	
1:15 PM	Water Words that Work - Communications Training *Eric Eckl, Water Words That Work*
2:20	Break - *refreshments available in 1st and 2nd floor lobby areas*
2:45	Water Words that Work *(continued)*
3:55	Measuring Embraced Behavior to Evaluate Effectiveness of Education and Outreach - *Jesse Poore, Felsburg, Holt and Ullevig Engineering*

Water Research in Iowa, 275 Scheman	
2:45 PM	**Tile Drainage Hydrology and Water Quality Among Select Cropping Systems** *Aaron Lee Daigh, Iowa State University, adaigh@iastate.edu* To assess cropping system impact on Iowa's tile-drained lands, tile drainage and nutrient loads are being monitored in annual and perennial bioenergy based research plots near Ames, IA. Monitored cropping systems include continuous corn with and without a winter rye cover crop, reestablished prairie with and without nitrogen fertilization, and corn-soybean rotation. In general, perennial crops reduced the quantity of drainage and drainage nitrate-nitrogen loads compared to annual crops. However, cropping systems did not affect tile drainage phosphate-phosphorous loads. Continuous corn with a winter rye cover crop reduced drainage quantity, drainage peak flows, and nitrate-nitrogen loads as compared to corn systems without a cover crop. To determine the fat of soil water, monitoring cropping system evapotranspiration is ongoing.

Water Research in Iowa, 275 Scheman	
3:05	**Novel Web-based Interfaces for Interactive Visualization of Large-Scale Hydrological and Meteorological Data** *Ibrahim Demir, University of Iowa, ibrahim-demir@uiowa.edu* As geoscientists are confronted with increasingly massive datasets from environmental observations to simulations, one of the biggest challenges is having the right tools to gain scientific insight from the data and communicate the understanding to stakeholders. Recent developments in web technologies make it easy to manage, visualize and share large data sets with general public. Novel visualization techniques and dynamic user interfaces allow users to interact with data, and modify the parameters to create custom views of the data to gain insight from simulations and environmental observations. This requires developing new data models and intelligent knowledge discovery techniques to explore and extract information from complex computational simulations or large data repositories. Scientific visualization will be an increasingly important component to build comprehensive environmental information platforms. This presentation provides an overview of the trends and challenges in the field of scientific visualization, and demonstrates information visualization and communication tools developed within the light of these challenges.
3:25	**Runoff from beef feedlots: Water quality concerns and options for control** *Daniel Anderson, Iowa State University, dsa@iastate.edu* The potential impact of feedlot runoff on water quality will be discussed. Potential options for mitigating these impacts and for improving runoff control at feedlots will be evaluated.
3:45	**Quantifying nitrate uptake efficiency under various flow regimes using real-time sensors in Lake Odessa - A backwater lake of the Mississippi River** *Doug Schnoebelen, University of Iowa, IIHR- Hydroscience & Engineering, douglas-schnoebelen@uiowa.edu* Backwater lakes of large river systems often exhibit optimal conditions for enhanced nitrate retention or removal. The inflow-outflow nitrate flux of Lake Odessa, a flow-regulated backwater lake located along the Mississippi River Pools 17 and 18, was investigated to determine the nitrate processing efficiency due to artificial manipulation of water levels and discharge associated with habitat management objectives. Results have implications for resource managers interested in enhancing nitrate processing efficiency as a part of normal operations.

Afternoon plenary session - Benton Auditorium, Scheman Building

4:30 PM Great Plains region water resources - *Brian Haggard, Director, Arkansas Water Resources Center*

Conservation practices targeting in watersheds - *Mark Tomer, Agricultural Research Service*

The value of water - *John Downing, Iowa State University*

6:00 Conference adjourns for the day

6:00 IFSMA general membership meeting - *275 Scheman*

7:00 IFSMA meeting adjourns

hydric soils

National Institute for Water Resources

Mark Tomer National Laboratory for Agriculture & the Environment in Ames

stiff stemmed grasses to control flow vs deep rooted for infiltration

Limnology? John Downing?

Natural history scale

downing@iastate.edu

Tuesday, March 5, 2013

7:30 AM Registration desk opens, morning refreshments - *1st floor, Scheman*

Posters and exhibits - *1st and 2nd floors, Scheman*

Morning workshops

All sessions are running concurrently on varying schedules. Please feel free to move from room to room selecting the topics of greatest interest to you. All sessions will take a break at 9:40 am.

Storm Water and Floodplain, Benton Auditorium	
Storm water management	
8:00 AM	The Watershed Game: Using interactive simulations to engage local leaders, provide effective education, and enhance their skills and toolbox of solutions towards achieving clean water goals - John Bilotta, University of Minnesota Extension and Minnesota Sea Grant
8:35	Green Alleys Clean Water: The Dubuque Project - Jon Dienst, City of Dubuque
9:10	Opening the LID Book of practices at the Cedar Rapids Public Library - Lisa Burch, YTT Design Solutions
9:40	Break - *refreshments available in 1st and 2nd floor lobby areas*
Floodplain management	
10:20	Iowa Watersheds Project: Plan, Implement, and Evaluate Watershed Projects to Reduce Flood Severity and Frequency in Iowa - Larry Weber, IIHR-Hydroscience & Engineering, University of Iowa
10:55	Can We Improve the Way We Conduct and Communicate Floodplain Science? - Ken Lubinski, USGS Upper Midwest Environmental Sciences Center
11:30	Iowa Flood Studies (IFloodS): Enhancing the Satellite-based Observations of Precipitation Events - Witold Krajewski, Iowa Flood Center, University of Iowa
12:00 PM	Lunch (provided) - *220-240 Scheman*

missed due to bi-weekly staff office

Speaker didn't show

Global Precipitation Measurement (GPM) Mission

http://ifis.iowafloodcenter.org/ifis/more/ifloods

Agriculture and the Environment, 250-252 Scheman	
8:00 AM	The 2012-2013 Hydrologic and Climatologic Event panel discussion - Harry Hillaker, state climatologist, IDALS – Iowa climatic record, Tim Hall, chief, Iowa Geological and Water Survey Bureau, Iowa DNR - hydrologic impacts John Holmes, field agronomist, Iowa State University Extension - agronomic impacts, agronomic planning decisions Kevin Landwehr, chief, Hydrology and Hydraulics Branch, Army Corps of Engineers, Rock Island District—federal reservoir impacts and reservoir management
9:40	Break - *refreshments available in 1st and 2nd floor lobby areas*
10:20	Developing the baseline for the Nutrient Reduction Strategy - Reid Christianson
10:55	Estimating pollutant load reductions for the Nutrient Reduction Strategy - Calvin Wolter
11:30	Water Resource Restoration Sponsored Projects (State Revolving Funds) - Patti Cale-Finnegan, Iowa Department of Natural Resources and Lori Beary, Iowa Finance Authority
12:00 PM	Lunch (provided) - *220-240 Scheman*

Education and Outreach, 260-262 Scheman	
8:00 AM	The Neighborhood Eco-Team Concept - Stacie Johnson, ISWEP
8:35	Cedar River Watershed Projects - Dennis Goemaat & Vern Fish
9:10	Watershed Education – The Big Picture - Mark Wagner, National Mississippi River Museum & Aquarium
9:40	Break - *refreshments available in 1st and 2nd floor lobby areas*
10:20	Joining Forces: Mutually Beneficial Collaborations Between Watershed Improvement Projects and Iowa's Small Colleges - Jodi Enos Berlage (Luther College), Rick Klann (Upper Iowa University) and Marty St. Clair (Coe College)

Education and Outreach, 260-262 Scheman	
10:55	Iowa's Watershed Management Authority Projects panel - Lora Friest (Turkey River), Eric Schmechel (Catfish Creek), Jennifer Fencl & Bill Micheel (Indian Creek)
12:00 PM	Lunch (provided) - *220-240 Scheman*

Water Research in Iowa, 275 Scheman	
8:40	**Soil water and temperature at the COBS site** *Robert P. Ewing, Iowa State University, ewing@iastate.edu* COBS, the Comparison of Biofuel Systems study, was established in 2008 to compare yield and environmental impact of various biofuel cropping systems. This presentation reports on soil water and temperature trends over the next several years.
9:00	**Community-wide urban storm water planning utilizing LiDAR, the WinSLAMM model and GIS** *John DeGroote, University of North Iowa GeoTREE Center, john.degroote@uni.edu* This presentation will summarize efforts to couple a GIS software, ArcGIS, with the urban storm water modeling software, WinSLAMM. We will also discuss the use of LiDAR data as part of a WinSLAMM modeling process in the Dry Run Creek watershed.
9:20	**Physically Based Coupled Surface Subsurface Hydrologic Modeling to Assess Flood Mitigation Strategies** *Nicholas Thomas, University of Iowa, IIHR- Hydroscience & Engineering, nicholas-thomas@uiowa.edu* Through HUD allocated funding, this research looks to further understand the addition of various flood mitigation strategies on selected Iowa watersheds, through a physically based modeling approach. Current status of watershed selection, model development, small scale applications, and future outlook are the key topics of discussion.
9:40	Break - *refreshments available in 1st and 2nd floor lobby areas*
10:00	**The NW Iowa Runoff Phosphorus Project: Six years of Tillage and P Sources Evaluation** *Antonio Mallarino, Mazhar U. Haq, and Matthew J. Helmers, Iowa State University, apmallar@iastate.edu* A field study based on large plots and natural precipitation has been conducted in NW Iowa since 2007 to study soil and P loss with surface runoff as affected by tillage and fertilizer or swine manure P management systems in corn-soybean rotations and continuous corn harvested for grain and with partial stover harvest. With tillage both P sources were incorporated into the soil in the fall, but with no-till the fertilizer was broadcast and the manure was injected (also in the fall). Soil and runoff P loss were much higher in the corn year of the rotation than in the soybean years, a result that was explained by much less soybean residue. On average for the corn-soybean rotation and P sources, soil loss with no-till was 30% of that with tillage; and the loss with tillage was 35% higher than for continuous corn managed with tillage, N-based manure, and both grain and stover harvest. There were small or no differences in runoff P loss between P sources. On average for the corn-soybean rotation and P sources, total runoff P loss with no-till was 74% of the loss with tillage; and the loss with tillage was similar to that for continuous corn with tillage. Runoff dissolved P expressed as the percentage of the total runoff P loss did not differ clearly between the P sources, but was higher with no-till (57%) than with tillage (28%). No-till greatly reduced soil loss (by 30%) and total P loss (by 74%), but increased two-fold the amount of dissolved P lost.
10:20	**Field Scale Hydrologic Impacts of Agricultural Drainage** *Brandon Sloan, University of Iowa- IIHR- Hydroscience and Engineering, sloan316@gmail.com* The 1-D hydrologic model DRAINMOD coupled with a stochastic rainfall generator is being used to analyze drain tile's hydrologic impact at the field scale. The impacts ar ebeing examined in terms of soil type, rainfall characteristics and drain spacing using the Richard-Baker Flashiness index as well as peak flows. The over-arching goal is to quantify these impacts in a way that furthers physical understanding and informs policy.

Water Research in Iowa, 275 Scheman	
10:40	**Riparian buffers - does farm size, tenancy, and/or gender of a landowner influence their usage of riparian buffers?** *Mark River, mark@markriver.com* Riparian buffers are critical to stream health, and the effectiveness of buffers depends on width. To assess the relationship between buffer width and farm size, tenancy, and landowner gender; the riparian buffers of 159 landowners along five streams in western Iowa were analyzed via GIS and phone/mail surveys. Regression and ANOVA were used to assess the relationship between these variables and average buffer width for each landowner category. Variances were high, and the means of the different sample groups were not statistically different. Hence this study found no evidence that the variables of farm size, gender, and tenancy influence choice of riparian buffer width in western Iowa. Some existing literature agrees with this finding, while other studies show these variables having a significant impact on landowner conservation decision-making. I will present the data from this study and discuss any conclusions that can be drawn.
12:00 PM	Lunch (provided) - *220-240 Scheman*

Afternoon plenary session - Benton Auditorium, Scheman Building

1:00 From know-how to do-now: Water quality and quantity solutions and land use decisions - *Kamyar Enshayan, director, Center for Energy and Environmental Education, University of Northern Iowa*

1:45 Regulation: Past, Present and the Potential Future - *Jim Gulliford, Soil and Water Conservation Society; Cathy Kling, Center for Agricultural and Rural Development, Iowa State University; Karen Flournoy, EPA Region 7; Jeff Mitchell, Des Moines Water Works; Craig Lang, former Iowa Farm Bureau president and dairy farmer; Brian Stineman, City of Davenport*

nutrient reduction is the "BIG" issue

3:00 Conference adjourns

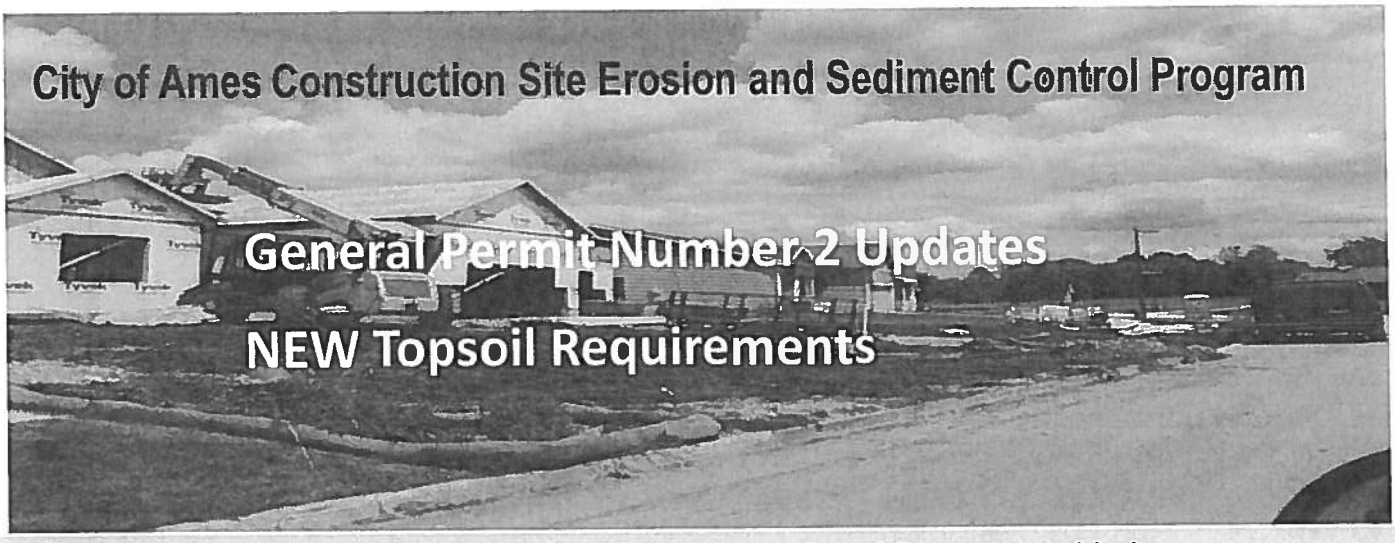
3:00 The Watershed Game - *275 Scheman*
A post conference workshop on the use of the Watershed Game and how Iowa educators, professionals, and local leaders could use the curriculum (optional session with additional registration fee which may be paid at the door)

5:00 Training concludes

Kathy Kling
Economics
Externality = unintended side effect of production that imposes costs on others

Taxes to appropriately correct a market failure
subsidies (cost share)
voluntary approaches (not subsidized)
Regulations
technology requirements
standards (permits)
permit trading, "cap + trade" "offsets"

soil + water conservation society
http://www.swcs.org
jim.gulliford@swcs.org



Prevent Soil Erosion Protect Ames Local Streams and Lake

CITY OF

smart WATERSHEDS
FOR CLEAN RIVERS AND STREAMS

Presenters:

Jake Moore , CPESC-IT, ICCSPPI

Pat Sauer, CPESC, CPSS, ICCSPPI

Wednesday February 27

9:00 am-10:30 am

Ames City Hall, Council Chambers

FREE event, Registration Required

Developers, builders, and subcontractors are encouraged to attend this meeting. Permit changes have taken place which you need to be aware of.

What will be covered

- Ames Stormwater Program
- IDNR GP#2 Updates and Ames COSESCO Permit Process
- Site Controls and Installation Issues
- New 4" Topsoil IDNR Requirement
- Inspection and Violations

REGISTRATION FORM *(Questions? Contact Jake Moore 515-239-5287 or jmoore@city.ames.ia.us)*

Name: Brandt Williamson Company: FOX Engineering

Phone: 515.233.0000 Email: sbw@foxeng.com

Complete and return this form before February 24, 2013 to: jmoore@city.ames.ia.us.

Mail to : Ames Public Works Dept., Smart Watershed Program 515 Clark Ave., Ames, IA 50010

Zimbra **sbw@foxeng.com**

City of Ames Stormwater Program. Training Wednesday February 27th City Hall Council Chambers

From : Jake Moore <jmoore@city.ames.ia.us> Tue, Feb 12, 2013 08:09 AM

Subject : City of Ames Stormwater Program. Training Wednesday February 27th City Hall Council Chambers 1 attachment

The City of Ames is offering a training for builders and developers. The training will cover the City of Ames stormwater program. It will address permits, erosion controls, new IDNR 4" topsoil requirement, and changes to the inspection process. Please see the attached information.

When: February 27th 9:00 a.m. -10:30 a.m.
Where: Ames City Hall, Council Chambers
Fee: Free event, Please register by Feb 24th

If you have questions please contact:

Jake Moore
City of Ames Public Works
jmoore@city.ames.ia.us
515-239-5287

City of Ames Erosion Control Program Training.pdf
439 KB

returned form ~~2-13-14~~ 2-12-13

SLR says he might attend
discussed w/Scott Williams
& fwd the info

fwd to JMG - Mitch

Ames Topsoil seminar 2-27-13

09:00 Scott Williams also here

Jake Moore + Pat Sauer presenting

Jake will send out powerpoint presentation

City is going to adopt Post-Con Ord this spring or summer

- have addressed water quantity - need to address quality

- looking @ amended soils & native landscaping program

- City expects EPA audit this year or next

10K people or discharge to an impaired water body

Ames COSESCO basically same as GP #2 (1.0 acre)

↳ 0.50 acre or part of larger development

when staging on an adjacent lot - Jake wants to see control for adjacent lot

bill in Iowa House or Senate to eliminate public notices (newspapers are opposed to this)

new COSESCO permit form to include impervious area (doesn't include sidewalk in R.O.W)

Transfer of Coverage of G.P. #2

individual lot SWPPP - site plan w/controls

DNR doesn't want individual lot transfers

Developers held responsible for common areas

- covered now lot bldrs should have all subcontractors sign co-permittee

Ames Topsoil Seminar 2-27-13

saltation

need to install controls correctly

seeding & mulching more cost effective that hard controls

DNR looks to see if there are enough controls to actually provide sufficient protection

stabilized entrance doesn't have to be installed until after basement is excavated - although PCC pour for basement is usually worst offender for track-out

Ames - 48 hrs to fix problem

if turned over to legal $500 - 1st offence

$700 - 2nd offense - each day separate offense

City will start inspecting individual lots 2x's

1) after ftgs

2) before stabilization (verify 4" topsoil)

Inactive sites should at least be mulched

Pat Sauer

EPA - 5yrs cycle 2014, 2019, 2024, etc

DNR - 5yrs 2012, 2017, 2022, etc

Jake is saying topsoil is "black dirt"

(3)

Ames Topsoil Seminar 2-27-13

Pat S.
- dark color
- low clay <3%
- pH 6-8
- loose, granular
- Organic matter content minimum 3%
- no debris, no clumps

soil quality restoration

"hydric" soils?

Take - soil probe to take samples to determine 4" depth
can amend soils to get 4" depth

Tracy Warner @ mtg concern about jumping curb that isn't backfilled damaging the curb.

City of Ames Public Works Smart Watersheds to find powerpoint slides

Zimbra **sbw@foxeng.com**

Confirmation: "Build a Rain Garden this Spring with NEMO's New App & Website"

From : UConn CLEAR <GoToWebinar.Notifications@citrixonline.com> Tue, Feb 19, 2013 09:52 A
Subject : Confirmation: "Build a Rain Garden this Spring with NEMO's New App & Website" 1 attachme
To : Brandt Williamson <sbw@foxeng.com>
Reply To : david dickson <david.dickson@uconn.edu>

CLEAR
Center for Land Use Education & Research

Build a Rain Garden this Spring with NEMO's New App & Website

JOIN WEBINAR

w/ef 2-2013
13:00-14:00

Join us on Wednesday, Feb 20, 2013 2:00 PM - 3:00 PM EST

Dear Brandt,

Thank you for registering for:

Build a Rain Garden this Spring with NEMO's New App & Website
Wednesday, Feb 20, 2013 2:00 PM - 3:00 PM EST

1. Click here to join:
   https://www2.gotomeeting.com/join/808854666/106169834

   This link **should not be shared** with others; it is unique to you.

2. You will be connected to audio using your computer's microphone and speakers (VoIP). A headset is recommended.

   Or, you may select Use Telephone after joining the Webinar.

   Toll: +1 (646) 307-1708

   Access Code: 331-393-792
   Audio PIN: Shown after joining the Webinar

Webinar ID: 808-854-666

Please send your questions, comments and feedback to: david.dickson@uconn.edu.

System Requirements
PC-based attendees
Required: Windows® 7, Vista, XP or 2003 Server

13:50

Rain Garden Webinar 13:00 - ~~14:00~~ 2-2043

Center for Land Use Education + Research

iPhone app is up + running
Android app to be up + running in 2 months
geared toward Connecticut
plans to create regional or national app's - based on funding

NEMO - Non Point Education for Municipal officials
e-mail from 2-13-13